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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/017,937	02/03/1998	STEPHEN D. JULSTROM	12078US01	9038

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EXAMINER

PENDLETON, BRIAN T

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 11/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/017,937

Applicant(s)

JULSTROM ET AL.

Examiner

Brian T. Pendleton

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 19 August 2002.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-127 is/are pending in the application.

4a) Of the above claim(s) 1-63 and 72-93 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 64-66,69,94,95,98,99,101-105,108,111,112,115,116,118-120,123,126 and 127 is/are rejected.

7) Claim(s) 67,68,70,71,96,97,100,106,107,109,110,113,114,117,121,122,125 and 126 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ .      6) Other: \_\_\_\_\_ .

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election without traverse of Group V in Paper No. 8 is acknowledged.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 101, 102, 126 and 127 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 101 and 126 that the microphones have low-frequency cutoff frequencies that are closely matched. The specification does not provide any support or description of how microphones can be matched in the specified manner. Due to their dependencies on claims 101 and 126, claims 102 and 127, respectively are not enabled

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 64-66, 94-95, 98, 99, 103-105, 115, 116, 118-120 are rejected under 35 U.S.C. 102(e) as being anticipated by Preves et al, US Patent 5,757,933. Preves et al disclose a microphone assembly having microphones B and F, signal processing circuitry 36 having gain adjuster 56 and phase adjuster 54. As taught in column 5 lines 14-35, the gain adjuster 56 and phase adjuster 54, part of the microphone system 40, are used to compensate for differences between the two microphones. Claims 64 and 103. Per claim 118, the microphones are identical models, therefore they are configured to limit the adverse effects of phase and amplitude mismatches. Per claims 65, 104 and 119, the microphone assembly is in an integral hearing aid, thus a case for housing the assembly is provided. As to claims 66, 105, 120, the hearing aid is mounted in an user's ear, which is an acoustical barrier. Regarding claims 94 and 111, if the switch S1 is closed, the resulting output signal is a pattern signal. Per claims 95 and 112, the hearing aid circuit contains a high pass filter. As to claims 98 and 115, the gain adjuster 56 provides closing matching of effective mid-band sensitivity of the microphone signals. Per claims 99 and 116, the high pass filter in the hearing aid circuit demarcates a lower end of an useful bandwidth.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 69, 108 and 123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Preves et al in view of Norris et al, US Patent 5,373,555. Preves et al disclose a microphone assembly having microphones B and F, signal processing circuitry 36 having gain adjuster 56 and phase adjuster 54. The assembly has a housing. However, Preves et al do not teach at least two sealing members to seal the at least two microphones to at least two openings in the assembly case. Norris et al disclose an ear microphone and gasket system. A microphone 17 is housed by casing 34. Gasket 28 is provided to isolate the microphone 17 from vibrations from the casing 34. The gasket acts as a sealing member, which was proven beneficial since the microphone 17 only would have picked up airborne sounds. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide two sealing members for microphones B and F.

***Allowable Subject Matter***

Claims 67, 68, 70, 71, 96, 97, 100, 106, 107, 109, 110, 113, 114, 117, 121, 122, 125 and 126 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (703) 305-9509. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Brian T. Pendleton

Brian Tyrone Pendleton  
November 17, 2002

*Forester W. Isen*  
FORESTER W. ISEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2000